

ABSTRACT

The invention provides neuropeptide ligands, G protein-coupled receptors and methods of screening for modulators of receptor activity. Identified modulators, including neuropeptide ligand mimetics, are useful as biostatic and biocidal agents of
5 varying scope, ranging from lethal activity restricted to particular invertebrate parasites to broad spectrum invertebrate parasiticides active on a wide range of invertebrates, including helminths and insects.